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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,747	10/06/2003	Akira Takayanagi	488-00062	2804

7590 10/21/2005

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EXAMINER	
HEWITT, JAMES M	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/679,747	**Applicant(s)** TAKAYANAGI ET AL.	
	Examiner James M. Hewitt	**Art Unit** 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 25 July 2005.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/30/04 & 1/31/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Species I (Figures 1-15) in the reply filed on 7/25/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 5-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/25/05.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Note that throughout the specification, the terms "axial side", "axial end" and "opposite" are used incorrectly to describe relative location of the structure in the drawings being referenced.

Claim Objections

Claims 1-4 are objected to because of the following informalities:

In claim 1 line 3, “axial side” should be replaced with “end”.

In claim 1 line 4, “axial side” should be replaced with “end”.

In claim 1 lines 5-6, the phrase “with a disengageable part *on a circumferentially fixed position*” is awkward and confusing.

In claim 1 line 8, the phrase “of an opposite axial end thereof” should be deleted for clarity.

In claim 1 line 10, “the device” should be inserted before “comprising”.

In claim 1 line 11, it is unclear as to what “opposite” modifies or is in relation to.

In claim 1 line 14, it is unclear as to what “opposite” modifies or is in relation to.

In claim 1 line 16, it is unclear as to what “opposite” modifies or is in relation to.

In claim 1 lines 16-19, the phrase “said engaging portion being further formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion” is awkward and confusing.

In claim 1 line 17, it is unclear whether “opposite axial side” is being used correctly.

In claim 1 line 20, it is unclear whether “axial side” is being used correctly.

In claim 1 lines 21-22, it is unclear as to how a position (axial position) can be characterized as being identical to a part (connection engageable portion).

In claim 1 lines 24-28, the phrase "said abutment finger being yet further formed so as to move the annular engagement projection in one axial direction with respect to the retainer means when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means" is awkward and confusing.

In claim 2 line 2, "the disengageable parts" lacks proper antecedent basis.

In claim 2 line 4, "the disengageable parts" lacks proper antecedent basis.

Regarding claim 4, it is unclear as to how the preamble of the claim can be said to be a connection verifying structure *for a pipe and a connector*, and yet in the body of the claim, the pipe and connector are positively claimed.

In claim 4 line 3, each instance of "axial side" should be replaced with "end".

In claim 4 lines 4-5, the phrase the phrase "with disengageable parts *on circumferentially fixed positions*" is awkward and confusing.

In claim 4 line 8, the phrase "of an opposite axial end thereof" should be deleted for clarity.

In claim 4 line 10, the phrase "for a pipe and a connector" should be deleted for clarity.

In claim 4 line 12, "including;" should be replaced with "the device including:".

In claim 4 line 13, it is unclear as to what "opposite" modifies or is in relation to.

In claim 4 line 15, the phrase "of an opposite axial end thereof" should be deleted for clarity.

In claim 4 lines 16-18, it is unclear as to how a position (axial position) can be characterized as being identical to a part (connection engageable portion).

In claim 4 line 18, "the disengageable part" lacks proper antecedent basis.

In claim 4 line 20, it is unclear as to what "opposite" modifies or is in relation to.

In claim 4 line 22, it is unclear whether "axial side" is being used correctly.

In claim 4 lines 22-24, the phrase "said engaging portion being formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion" is awkward and confusing.

In claim 4 lines 26-30, the phrase "said abutment finger being yet further formed so as to move the annular engagement projection in one axial direction with respect to the retainer means when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means" is awkward and confusing.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by McNaughton et al (US 5,303,963).

With respect to claim 1, McNaughton et al discloses a connection verifying device for a pipe and a connector to verify complete mechanical connection between a generally cylindrical connector and a pipe inserted therein, the connector including a tube connecting portion (see Figure 1) on one axial side thereof and retainer means (38) on an opposite axial side thereof, the retainer means having a connection engageable portion with a disengageable part (39) on a circumferentially fixed position, the pipe including an inserting end portion formed with an annular engagement projection (48/50) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion, comprising: a body portion (52) to be mounted to an opposite axial side of the connector; an abutment finger (54) protruding from the body portion in one axial direction; verification means constructed on the body portion and having an engaging portion (56), the engaging portion being formed to engage in an opposite axial direction with a stop portion (44) formed on an axially fixed portion of the connector while the body portion is mounted to an opposite axial side of the connector, said engaging portion being further formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (refer to Figures 1 and 2); and, the abutment finger being further formed so that one axial side of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means while the engaging portion of the verification means engages with the stop portion of the connector (see Figures 1 and 2), said abutment finger being yet further formed so as to move the annular engagement projection (the abutment finger(s), as they engage the tube behind and in abutting relationship with the annular projection, can be used to move the tube and thus the projection) in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 1 and 2).

With respect to claim 2, wherein the disengageable parts are formed in diametrically symmetrical positions and a pair of the abutment fingers (54) are formed in diametrically symmetrical positions on the body portion so as to correspond to the disengageable parts. Refer to Figure 3.

With respect to claim 3, wherein the body portion is formed in C-shape or C-shape in cross-section so as to snap-fit on the pipe. Refer to Figures 1 and 3. Given the broadest reasonable interpretation, the body portion is formed in C-shape or C-shape in cross-section.

With respect to claim 4, McNaughton et al discloses a connection verifying structure for a pipe and a connector comprising: a generally cylindrical connector including a tube connecting portion (see Figure 1) on one axial side thereof and retainer means (38) on an opposite axial side thereof, the retainer means having a connection engageable portion with disengageable parts (39) on circumferentially fixed positions; a pipe having an inserting end portion formed with an annular engagement projection (48/50) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion; a connection verifying device for a pipe and a connector mounted to the pipe and the connector to verify mechanical connection between the pipe and the connector, including; a body portion (52) mounted to an opposite axial side of the connector; an abutment finger (54) protruding from the body portion in one axial direction, and entering in the connector via the opening of an opposite axial end thereof, and further formed so that one axial end portion of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means (see Figure 2); verification means constructed on the body portion and having an engaging portion (56), the engaging portion being engaged in an opposite axial direction with a stop portion (44) formed on an axially fixed portion of the connector; said engaging portion being formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (see Figures 1 and 2); and, said abutment finger being formed yet further so as to move the annular engagement projection (the abutment finger(s), as they engage the tube behind and in abutting relationship with the annular projection, can be used to move the tube and thus the projection) in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 1 and 2).

Claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Bucher et al (US 6,343,814).

With respect to claim 1, Bucher et al discloses a connection verifying device for a pipe and a connector to verify complete mechanical connection between a generally cylindrical connector and a pipe inserted therein, the connector including a tube connecting portion (as at leftmost end in Figure 1) on one axial side thereof and retainer means (16) on an opposite axial side thereof, the retainer means having a connection engageable portion with a disengageable part on a circumferentially fixed position, the pipe including an inserting end portion formed with an annular engagement projection (30) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion, comprising: a body portion (26) to be mounted to an opposite axial side of the connector; an abutment finger (112) protruding from the body portion in one axial direction; verification means constructed on the body portion and having an engaging portion (100), the engaging portion being formed to engage in an opposite axial direction with a stop portion (end of female member as at 36) formed on an axially fixed portion of the connector while the body portion is mounted to an opposite axial side of the connector, said engaging portion being further formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (see Figures 8 and 9 and col. 4, ll. 55 – col. 5, ll. 23); and, the abutment finger being further formed so that one axial side of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means while the engaging portion of the verification means engages with the stop portion of the connector, said abutment finger being yet further formed so as to move the annular engagement projection in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 8 and 9 and col. 4, ll. 55 – col. 5, ll. 23).

With respect to claim 2, wherein the disengageable parts are formed in diametrically symmetrical positions and a pair of the abutment fingers are formed in diametrically symmetrical positions on the body portion so as to correspond to the disengageable parts. Refer to Figures 1-3, 5, 6 and 9.

With respect to claim 3, wherein the body portion is formed in C-shape or C-shape in cross-section so as to snap-fit on the pipe. Refer to Figure 5.

With respect to claim 4, Bucher et al discloses a connection verifying structure for a pipe and a connector comprising: a generally cylindrical connector including a tube connecting portion on one axial side thereof and retainer means (16) on an opposite axial side thereof, the retainer means having a connection engageable portion with disengageable parts on circumferentially fixed positions; a pipe having an inserting end portion formed with an annular engagement projection (30) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion; a connection verifying device for a pipe and a connector mounted to the pipe and the connector to verify mechanical connection between the pipe and the connector, including; a body portion (26) mounted to an opposite axial side of the connector; an abutment finger (112) protruding from the body portion in one axial direction, and entering in the connector via the opening of an opposite axial end thereof, and further formed so that one axial end portion of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means; verification means constructed on the body portion and having an engaging portion (100), the engaging portion being engaged in an opposite axial direction with a stop portion (end of female member as at 36) formed on an axially fixed portion of the connector; said engaging portion being formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (see Figures 8 and 9 and col. 4, ll. 55 – col. 5, ll. 23); and, said abutment finger being formed yet further so as to move the annular engagement projection in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 8 and 9 and col. 4, ll. 55 – col. 5, ll. 23).

Claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Denanny (EP 0 484 690 A2).

With respect to claim 1, Denanny discloses a connection verifying device for a pipe and a connector to verify complete mechanical connection between a generally cylindrical connector and a pipe inserted therein, the connector including a tube connecting portion (14a) on one axial side thereof and retainer means (20) on an opposite axial side thereof, the retainer means having a connection engageable portion with a disengageable part (20a) on a circumferentially fixed position, the pipe including an inserting end portion formed with an annular engagement projection (B) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion, comprising: a body portion (16) to be mounted to an opposite axial side of the connector; an abutment finger protruding from the body portion in one axial direction; verification means constructed on the body portion and having an engaging portion (16b), the engaging portion being formed to engage in an opposite axial direction with a stop portion formed on an axially fixed portion of the connector while the body portion is mounted to an opposite axial side of the connector, said engaging portion being further formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (see Figures 3 and 4); and, the abutment finger being further formed so that one axial side of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means while the engaging portion of the verification means engages with the stop portion of the connector (see Figure 4), said abutment finger being yet further formed so as to move the annular engagement projection in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 3 and 4).

With respect to claim 2, wherein the disengageable parts are formed in diametrically symmetrical positions and a pair of the abutment fingers are formed in diametrically symmetrical positions on the body portion so as to correspond to the disengageable parts. Refer to Figures 2 and 4.

With respect to claim 3, wherein the body portion is formed in C-shape or C-shape in cross-section (as at 16c) so as to snap-fit on the pipe.

With respect to claim 4, Denanny discloses a connection verifying structure for a pipe and a connector comprising: a generally cylindrical connector including a tube connecting portion (14a) on one axial side thereof and retainer means (20) on an opposite axial side thereof, the retainer means having a connection engageable portion with disengageable parts (20a) on circumferentially fixed positions; a pipe having an inserting end portion formed with an annular engagement projection (B) on an outer peripheral surface thereof, the inserting end portion being inserted in the connector via an opening of an opposite axial end thereof so that the annular engagement projection is snap-engaged with the connection engageable portion; a connection verifying device for a pipe and a connector mounted to the pipe and the connector to verify mechanical connection between the pipe and the connector, including; a body portion (16) mounted to an opposite axial side of the connector; an abutment finger protruding from the body portion in one axial direction, and entering in the connector via the opening of an opposite axial end thereof, and further formed so that one axial end portion of the abutment finger extends to an axial position generally identical to the connection engageable portion on the disengageable part of the retainer means (see Figure 4); verification means constructed on the body portion and having an engaging portion (16b), the engaging portion being engaged in an opposite axial direction with a stop portion formed on an axially fixed portion of the connector; said engaging portion being formed to be located in an opposite axial side from the stop portion of the connector while the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion (see Figures 3 and 4);

and, said abutment finger being formed yet further so as to move the annular engagement projection in one axial direction with respect to the retainer means to engage the annular engagement projection with the connection engageable portion when the abutment finger abuts the annular engagement projection of the pipe which does not yet engage with the connection engageable portion of the retainer means (see Figures 3 and 4).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES M. HEWITT
PRIMARY EXAMINER